THE HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT JOINT BOARD DECISION:

AN ISSUES ANALYSIS

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Environment Ontario

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Minister

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THE HALTON REGION LANDFILL

ENVIRONMENTAL ASSESSMENT

JOINT BOARD DECISION:

AN ISSUES ANALYSIS

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EXECUTIVE SUMMARY

The lengthy and costly Halton Region landfill environmental assessment hearing was completed on November 8, 1988. The Joint Board Decision was released on February 24, 1989.

This case is important for several reasons:

- it is the first major regional waste management undertaking to be heard under the EA Act, before a Joint Board; and,
- it involved a two-site undertaking (Site F in Burlington or Site D in Milton) for which the Joint Board was asked to approve one or another landfill site.

Site D in Milton was approved with conditions.

This report contains an analysis of the EA-related issues raised in the Decision document. The issues have been arbitrarily divided into the following categories:

1. Consideration of Alternatives - the Joint Board criticizes Halton for its weak consideration of alternative waste management technologies and inconsistent treatment of candidate landfill sites.
2. Defining the Undertaking - the Joint Board criticizes Halton for its decision to take forward a two-site undertaking.
3. The Government Review - the Joint Board criticizes the EA Branch for its treatment of the Government Review and suggests a more critical "hands-on" approach in the future.
4. The Hearing Process - the Joint Board expresses concern with some aspects of the conduct at the hearing and makes a number of recommendations for future improvement.
5. Municipal In-fighting - the Joint Board criticizes both Burlington and Milton for obstructing the Region's efforts at siting a landfill.
6. Public Consultation and Social Impact Assessment - SIA emerges as a new factor to be considered in solid waste management EAs.

The implications of the above issues are explored and recommendations for changes in the EA program are contained in the body of this report.

1.0 INTRODUCTION

The recent Halton Region landfill EA Joint Board Decision is important for several reasons:

- it is the first major regional waste management undertaking to be heard under the Environmental Assessment Act, before a Joint Board; and
- it involved a two-site undertaking for which the Joint Board was asked to approve either one or another landfill site;

The Joint Board's decision provides some interesting insights, observations and conclusions. It adds to the body of knowledge surrounding Ontario's evolving EA and Approvals process; particularly as it applies to the subject of solid waste management.

This report explores the important EA issues and their potential implications for the EA program. Other issues related to the Ministry of Environment's "technical" mandate and policies (e.g., reasonable use concept, engineered facilities policy) are acknowledged here but not explored in this report.

The decision of one Board does not bind, through precedent, subsequent Boards in similar matters. On the other hand, analyzing Board decisions is important because they are a potentially powerful tool for their persuasive value in guiding and shaping the subsequent evolution of the administration and practice of solid waste management planning and Ontario's EA program. It is also reasonable to assume that the decision of one Board, particularly in an important case such as this, will have a certain amount of influence on and carry a certain amount of weight with other members of the Board in future hearings.

2.0 BACKGROUND

The Regional Municipality of Halton, which was created in 1974, has the responsibility to provide solid waste management facilities for its area municipalities: the City of Burlington, the Town of Oakville, the Town of Halton Hills, and the Town of Milton. The Region has been attempting to site a landfill for this purpose during the 15 years since 1974. The following is a brief synopsis of the Region's planning approach during this period.

This siting process can be divided into two roughly equal time periods or phases. During the first phase between 1974 and 1981, the Region considered potential sites which included one in Burlington sandwiched between the the existing Regional landfill site and the old Bayview Park landfill site and another in Milton at the junction of Tremaine and Britannia Roads. The Region opted for the latter and gained land use approval and financial for the Milton site from the Ontario Municipal Board (OMB) in June 1979. But no approval under Part V of the Environmental Protection Act was received.

The Town of Milton and local citizens fought the OMB decision over the next several years with the Town refusing to rezone the Tremaine/Britannia site to allow the construction and operation of a landfill. In the meantime, the Burlington site which was partly owned by a quarry firm called National Sewer Pipe (NSP) continued to be brought forward as a separate private sector landfill proposal.

The second phase, between 1981 and up to the present, consists of the time period since the Region's waste management planning efforts were made subject to the requirements of the Environmental Assessment Act (EAA). As part of the EA process the Region concluded that it required additional landfill capacity for approximately 8 million cubic metres of waste during the twenty year study period (1988-2008). Other aspects of the Region's proposed solid waste management system include a modest recycling program which is already underway and an unsited Energy From Waste (EFW) incineration facility which is scheduled to come on stream in 1996.

At the conclusion of a multi-phase site selection process, two "preferred" candidate landfill sites were identified by the Region. However, only one of these sites is required during the study period. The two preferred candidate landfill sites are:

- Site D in the Town of Milton, located between Highway 25 and First Line, approximately one-half kilometer south of Britannia Road (in the same general vicinity as the previously identified Tremaine/Britannia site).
- Site F in the City of Burlington, located north of Highway 403 on the northwest corner of the North Service Road and King Road (includes the NSP lands and the previously identified Burlington site).

The Region's consultants favoured Site F consistently since 1985. However, the Region decided to bring both sites forward and seek approval for either site.

After one negative Government Review in February 1986 the Region submitted further information and received a positive conclusion on the Supplementary Review in April1987. The Joint Board Hearing began on May 5, 1987 and concluded on November 8, 1988. In all, the hearing involved 194 days of evidence and argument, almost fifty thousand pages of transcript and about one thousand exhibits (p.9).* The Joint Board Decision, which was released on February 24, 1989, approved Site D with conditions.

3.0 ISSUE IDENTIFICATION

The Joint Board makes a number of important comments in its Decision document which are directly relevant to aspects of the EA program. These comments are particularly concentrated in a section the

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* Page numbers refer to the Joint Board Decision Document

Joint Board has labelled "Environmental Assessment Process Considerations" (pp.151-171). This report arbitrarily divides the Board's comments into the following issue categories:

1. Consideration of Alternatives
2. Defining the Undertaking
3. The Government Review
4. The Hearing Process
5. Municipal In-Fighting
6. Public Consultation and Social Impact Assessment

4.0 ISSUE ANALYSIS

This part of the report provides a more complete description and analysis of the issues identified in Section 3.0. The implications of this chapter for the EA Program are discussed and recommendations are made.

Overall, the Joint Board found that in attempting to comply with the requirements of the EA Act,

> "the Region (of Halton) undertook the task with vigour and enthusiasm...(and) was generally successful in understanding and applying the Act, although it did make a number of missteps along the way." (p.151)

Problems are identified in the following areas:

4.1 Consideration of Alternatives

(a) Alternatives to the Undertaking

The Joint Board strongly criticizes the Region for its treatment of alternatives to the undertaking. Based on the information presented in the EA document and during the hearing the Joint Board goes so far as to conclude that,

> "there was barely sufficient evidence before this Board to conclude that, whatever else may be done with Halton's waste in the future, a landfill is required now." (p.164)

This strong endictment of the Region's efforts in considering alternatives to the undertaking occurs in several other places in the Decision document. For example, on p.163,

> "the Board feels that the proponent did not evaluate alternatives to the undertaking in an imaginative, creative and serious fashion. The Region's treatment of this matter in keeping with Section 5(3)(b)(iii) of the Environmental Assessment Act was perfunctory to say the least, in that the Board received no substantive evidence on: 'an evaluation of the advantages and disadvantages to the environment of...the alternatives to the undertaking."

And reiterated again on p.13 that,

> "the lack of attention to other means of dealing with waste (than landfill) was the weakest part of the proponent's case with respect to the need for the undertaking."

The Joint Board goes further still by rejecting the Region's position "that to have done more with respect to alternatives to landfill would have been unreasonable." (p.164) For example, with regard to the Region's process,

> "the possibilities for waste reduction through composting and source separation should have been succinctly described. The examination of options such as mandatory recycling, individual waste levies and municipal waste reduction by-laws, should have formed part of the evaluation." (p.13)

The Joint Board also seems to be suggesting a standard for the consideration of alternatives in solid waste management proposals by indicating that,

> "a proponent making application for a landfill in today's environment must have at least a rudimentary appreciation of the composition of the waste that is to be landfilled and the practicality of alternatives to landfill which might reduce environmental degradation. A reasonable consideration of alternatives under Section 5(3)(d) might include: practicality of composting; residential waste reduction possibilities; anticipated waste reductions from industrial and commercial reuse and recycling; and, commercial and residential (including apartment buildings) source separation programs." (p.164)

Based on the Region's efforts and the impending garbage "crisis" in Halton, the Joint Board provided the following weak endorsement of the "need" for a landfill,

> "in this case, the Board was convinced that the situation had deteriorated to one of 'crisis management'. Irrespective of what else is done now, there would still have to be a landfill component to Halton's waste management program. Thus, we concluded that there is a need for the undertaking, whatever may be done subsequently about alternatives." (p.13)

On a more general note, the Joint Board concludes its own consideration of alternatives to the undertaking and the need for a landfill by suggesting that,

> "if the problem of landfilling of waste is to be addressed head-on, so that the trauma associated with landfill assessments is not encountered every 10 to 15 years, there will have to be a concerted effort, from the personal level to the highest governmental and industrial levels, to make garbage either more valuable as a resource, or more painful, in an economic sense as a disposable material." (p.14)

(b) Alternative Methods of Carrying Out the Undertaking

The issue of traceability and consistency is a major factor in the Joint Board's decision. The Joint Board noted that it was "concerned about the inconsistency of treatment throughout the (landfill) site selection process." (p.57) Specifically, it centred around the Region's apparently separate, but parallel, process of inserting and evaluating potential pit and quarry sites when the original site selection criteria clearly favoured sites in thick glacial till deposits.

The Joint Board acknowledges the Region's assertion that "judgement had to be applied to the weighted evaluation factors in order to progress from stage to stage" but concurs with the Ministry's observation that "it (was) difficult to relate the outcome of such 'judgements' to the data that were apparently before the consultants making the decisions" (p.152). The Ministry's concern was that the Region,

> "did not provide a clear explanation to describe the separate evaluation methodology used for pits and quarries that seemingly allowed inconsistent treatment of these sites in comparison to the clay/till plain candidate areas." (p.153)

After reviewing the landfill site selection process stage by stage, the Joint Board found that,

> "had the same criteria which were applied to the areas in the till plains of Halton been applied in the same fashion to Site F (the preferred pit and quarry site), it would not have survived...as a landfill site candidate." (p.156)

And that,

> "in our opinion, this 'timing' decision which put pits and quarries on a selection list after initial screening would have eliminated Site F from the candidate areas, was not a reasonable one." (p.157)

Other examples of inconsistency in the Region's EA process are noted by the Joint Board. They include:

- inconsistency within specific evaluation categories. For example, expanding the boundaries of only Site F among pit and quarry sites (beyond those of the licenced pit)so that it would be large enough to handle the required volumes. (pp.157-158)
- inconsistency in the treatment of alternative methods of carrying out the undertaking. For example, only evaluating two of the six candidate landfill sites (D and F) on an "engineered" basis. (p.158)
- inconsistency in the hydrogeologic assessment. For example, comparing unlike situations as though they were the same. (p.108)
- inconsistency in the application of criteria pertaining to the land use planning environment. For example, keeping a candidate site (F) in the running even though consistent application of exclusionary land use planning criteria should have eliminated it early on. (p.123)
- inconsistency in the assumptions about performance of site design. For example, considering the possibility of underdrain failure at Site D, but not at Site F. (p.96)
- inconsistency in the application of criteria pertaining to the natural environment. For example, keeping Site F in the running even though available, detailed information indicated that it contravened established exclusionary criteria. (p.43)
- inconsistency in the application of criteria pertaining to traffic impacts. For example, failure to factor in the removal of transportation risk along the haul route leading to the existing regional landfill site adjacent to Site F if Site D were selected. (pp.49-50)
- inconsistency in the risk assessment. For example, comparing the effects of a "worst case scenario" of an engineered landfill system failure at all of the six candidate sites regardless of the variable probability of the threat at a particular site. (pp.57-59)

Implications

The preceding analysis suggests that, in the consideration of alternatives for a landfill EA, proponents need to:

- demonstrate an appreciation of both the volumes and composition of the waste to be managed.
- go beyond a cursory canvassing of alternative waste management technologies/ processes, based on the implicit assumption that a landfill-dominated system is a foregone conclusion, particularly for alternatives which might reduce the volume of waste for disposal (e.g., 4Rs programs).
- consider, at a minimum, the feasibility of and public receptiveness to the following alternative technologies/processes: composting; residential waste reduction programs; industrial and commercial reuse and recycling; and commercial and residential (including apartment buildings) source separation programs.
- establish an acceptable evaluation approach early on in the EA planning process and follow it clearly and consistently to its logical conclusion without introducing exceptions or manipulating the process to favour a particular alternative or type of alternative. Any necessary modifications to the approach should be reasonable and uniformly and consistently applied.

4.2 Defining the Undertaking

The Region's undertaking consisted of two sites, D or F, either of which the proponent felt was suitable as a landfill site. The Region's consultants consistently favoured Site F in Burlington from among the six candidate landfill sites, even after a more detailed comparison of the two sites (D and F) was carried out and submitted as additional information. The Region, however, decided to include both as its undertaking and request approval from the Province for one or the other.

There were obvious "political" motivations behind Halton's decision to use this approach. The strategy to provide a comparison between a hydrogeologically "simple" site (D) and a hydrogeologically contentious site (F) paid off handsomely for the City of Burlington.

The Joint Board approved Site D in Milton but not before expressing concern with the Region's decision to bring forward a two-site undertaking for the following reasons:

- the Joint Board suggests that if established evaluation criteria had been consistently applied throughout the site selection process then the choice between the two sites was not a difficult one and should have been made by the Region. (p.59, p.157)
- the Joint Board believes that the two-site approach contributed to the cost and caused unnecessary trauma for those potentially affected by both sites; both of which could have been avoided if a single site had been selected as the undertaking. (p.60, p.157)

- the Joint Board rejects outright the Region's assertion that a single site approach would have taken just as long as the two-site approach. (The Region argued that if a single site had been brought forward opponents would have introduced the other alternative site at the hearing). (p.157)

- the Joint Board strongly implies that the two-site approach to defining the undertaking is outside the language and intent of the EA Act.

  "it is the view of this Board that the language of the Act is clear: the 'undertaking' is an enterprise or an activity, or a proposal, a plan or a program in respect of an enterprise or an activity. The transfer of responsibility to the Joint Board for deciding which of two proposals should be the undertaking was not a satisfactory or acceptable conclusion to the environmental assessment planning process." (p.157)

The Joint Board found other problems with the way the two-site approach affected the EA process. One of the general problems with the two-site approach is that, "to a large extent it failed to arrive at a net environmental impact by taking into account beneficial effects at one site if the other site were chosen." (p.48) For example, the Region's consultants "did not consider the possible positive net effect which might occur at Site F (which is immediately adjacent to the current Regional site) as a consequence of the removal of existing landfill related traffic."

However, the Joint Board seems to be sending mixed signals on this point by rejecting the logic behind the presentations of several parties which suggested that the approval of a landfill at the other site could provide unexpected spin-off "advantages". For example, it was suggested that "the approval of a landfill near a heritage feature (e.g., the Ford farm near Site D), with appropriate conditions, could have the effect of preserving a heritage feature not otherwise protected". (p.16) The Joint Board called these potential advantages "extraneous to the undertaking and time-consuming for the Hearing". (p.16)

Implications

The preceding analysis suggests that proponents should be discouraged from taking forward multiple landfill site undertakings (e.g., "either site X or site Y") and asking the Board or the Minister to choose between or among them. The Joint Board rejects this approach in the Halton decision on the following grounds:

- the Board suggests that it is the proponent's responsibility to select a single preferred alternative.

- the Board suggests that multiple site undertakings take longer to hear than single site undertakings as well as adding to the cost and trauma of the EA process for those potentially affected.

- the Board implies that a multiple site undertaking is outside the language and intent of the EA Act (s.1(0)(i)).

4.3 The Government Review

The part of the Halton decision which touches most directly on the EA Branch and its administration of the EA Act are the Joint Board's comments on the Government Review. The Board's comments provide a critique of the EA Branch's involvement in the Halton case as well as some important observations about potential changes to the status quo; particularly, the role of the EA Branch during the review process and perhaps also during the PSC.

The Joint Board indicates that in the Halton case, it is:

> "concerned that the Ministry officials did not apply enough judgement when reviewing the environmental assessment before it was submitted to public scrutiny in the hearing ... [because] several concerns had been expressed in the original environmental assessment review which had not been dealt with a year later when the Environmental Assessment Branch provided its supplementary review." (p.160)

After examining the evidence from the EA Branch Review Coordinator, the Joint Board concluded that,

> "the Environmental Assessment Branch had apparently solicited the views of other ministries and put these views together as the collective response of 'possibly affected government agencies' without critically examining the substance of the integrated responses." (p.160)

It is suggested that in the Halton case,

> "it would have been helpful to the Board if serious unresolved inconsistencies had been thoughtfully dealt with before the environmental assessment was considered acceptable from the Ministry's perspective." (p.161)

Further comments on this point suggest two standards for the EA Branch to incorporate into future Government Reviews. Firstly, that the EA Branch,

> "should apply reason and judgement to the information received to determine whether or not it is sufficient for a meaningful hearing process to commence." (p.161)

The Joint Board notes, "while Branch officials are not in a position to deny the hearing from taking place, they certainly are in a position to appear before the hearing to explain and support their conclusions with respect to the adequacy of the environmental assessment." (p.161).

And secondly that,

> "by the time the hearing commences, the EA Branch should be satisfied at a fundamental level that the available information is sufficient and is logically and reasonably portrayed so that the hearing and all those affected by it will be in a position to consider the evidence intelligently." (p.161)

The Joint Board appears to be calling for a more prominent, "hands on" role for the EA Branch in conducting a critical evaluation of Reviewer's comments while preparing the Government Review in order to:

- identify and resolve inconsistencies
- ensure that the information is complete enough and available to those affected so that the hearing can proceed in an intelligent manner.

This role, it is suggested,

> "would require dedicated, intelligent and constructively critical involvement of members of the Environmental Assessment Branch working with all parties and their consultants to understand local concerns and to satisfy themselves that the necessary studies had been completed and shared with all parties before the hearing process begins." (p.161)

Disappointingly, the Joint Board misses an opportunity to more clearly articulate what is meant by the above comments (as it did, for example, with hydrogeology and hearing procedures) by concluding that,

> "it was not necessary for the Board or the government to establish more clearly defined rules. Rather, regional and local levels of government must work with more senior levels to understand what is required in an environmental assessment, and to avoid unnecessary steps and unnecessary detail." (p.162)

Implications

At face value more "dedicated, intelligent and critical involvement of members of the Environmental Assessment Branch" suggests potentially serious implications from a resources standpoint (e.g., people, time and money). Under the present approach it would require either a significant increase in time and effort devoted to each project by EA Branch staff. Alternatively, these comments could be interpreted to suggest a rethinking of the status quo and a completely different approach to the Government Review. One option could be to refine the current "content-oriented" approach by focussing more on important issues raised in specific proposals, some of which are outside or incompletely covered by the existing patchwork of mandates which make up the Government Review Team (e.g., social impacts).

Regardless of the approach chosen, guidelines (or policy) will be required to ensure consistency and credibility. Now, more than ever, the EA Branch has to come to terms with just what constitutes "adequacy" in an environmental assessment (beyond a repetition of the legal wording found in s.1(c) and s.5(3) of the EA Act).

4.4 The Hearing Process

The Joint Board makes a number of observations about the hearing process in its Halton decision. The message is mixed. While it accepts that Board hearings take place in a quasi-judicial setting and are adversarial in nature, it often seems frustrated at times with the tactics used by some of the parties and perhaps even naive about the limitations of this format.

4.4.1 The Role of the Hearing

The Joint Board clearly saw its role and the role of the hearings was to select the "best site" for landfilling in Halton Region. The following passages indicate the frustration felt by the Board at some of the parties who evidently had different agendas.

> "the Board...felt that the purpose of all interventions should have been to assist the Board in its consideration of this matter so that the best site would be selected ... in this Hearing it was often difficult to determine whether some parties were more concerned with preventing the establishment of a landfill in their community than with finding the best site for a landfill." (p.204)

On the role of expert witnesses in an adversarial quasi-judicial forum,

> "expert witnesses often appeared reluctant to provide information that would jeopardize their client's position. This attitude handicapped the Board in its effort to select the most environmentally suitable location for a landfill in Halton. This may suit the adversarial nature of hearings and the obligation of counsel to 'protect clients' interests', but it is counterproductive and risky for a hearing Board to decide on environmental suitability in such a climate." (p.168)

On the role of lay witnesses in an adversarial quasi-judicial forum,

> "the Board is concerned about the extent to which individual citizen witnesses digressed in providing their non-expert evidence. In many cases the digression was not helpful to the Board. It would be useful if counsel would instruct 'non-expert' witnesses on the nature of the decision and the kinds of evidence which could assist a Board in arriving at a correct decision. Allowing such witnesses to stray into extraneous material was not helpful." (p.163)

On the sharing (or lack of sharing) of information among parties at the hearing,

> "Often it seemed to us that information was withheld by one party or another for dramatic introduction late in a hearing ... failure to undertake the necessary studies in a timely fashion and exchange the information between the parties, caused aggravation for citizens - aggravation subsequently directed against the process of environmental assessment itself." (p.162)

On the attempt by the Town of Milton to "ambush" the proceedings late in the hearing,

> "the maneuvering Milton counsel to introduce evidence which they had collected six months earlier in the absence of experts for the other parties, the existence of which they did not acknowledge at appropriate times, had negative probative value." (p.70)

4.4.2 Hearing Time

The Joint Board concluded that a significant amount of hearing time had been wasted. It took the opportunity to award a portion of the costs against both the Town of Milton and the City of Burlington in particular for "consuming a considerable amount of (hearing) time unnecessarily" (p.209). However, this problem highlights an inherent shortcoming of the quasi-judicial framework. Regardless of how irrelevant

information may appear at the time it is received, the Joint Board acknowledges that it cannot prejudge the relevance of specific information or witnesses during the hearing without leaving it open to court challenge for prejudging the decision.

4.4.3 Ways to Improve and Shorten Future Hearings

Based on the "Halton" experience, the Joint Board makes some suggestions that it feels will improve and shorten future hearings. They are as follows:

• use of available data - the Joint Board disagrees with the Region's lead consultant in his judgement that "more detailed information for or against a given site (would not be considered) if information of a comparable level of detail was not available for other sites" (p.166). The Joint Board finds that,

> "the proponent was inconsistent when it ruled out early detailed biophysical evidence that would have eliminated Site F in the early going, but kept the site in the running because of early, expensive and detailed hydrogeological work done especially to establish its suitability before comparable work was done on other sites in the Region." (p.167)

• consistency of evaluation - the Joint Board found discrepancies in the evaluation of sites which it believes may have occurred because of poor coordination between the Region's principal consultant and the sub-consultants. It concludes,

> "the tables do not reflect the facts available at the time and are not, therefore, a sound basis for narrowing the search area for landfill sites." (p.168)

• perception of fairness - closely related to the issue of consistency in the evaluation of alternative methods of carrying out the undertaking, procedural fairness figures prominently in the Joint Board's decision. The key observation was that,

> "the process must not only be fair, it must be seen to be fair by the citizens affected by it. Many of the citizen witnesses expressed frustration about the perceived 'unfairness' of the process ... it was not difficult to find examples of actions that appeared unfair." (p.169)

The Joint Board lists eight different examples of unfairness (pp.169-170), all of which favour the inclusion and maintain the preferred status accorded Site F in Burlington. The Joint Board goes on to say that,

> "there were reasons offered for each of the (examples of unfair treatment) ... but collectively they could be taken to suggest that the proponent in this case preferred Site F before, during and after the environmental assessment process, and throughout the Hearing. We did not find supportable reasons for the resolute shifting of criteria in favour of one site only. It is not surprising, therefore, that the public often expressed their perception of the bias in the process, to the detriment of both the process and public support for Provincial policy in this area." (p.170)

• accountability - what the Joint Board labels "accountability" is part of a larger project management problem identified with the Halton EA process and present in other currently ongoing solid waste management EA processes in Ontario. The Joint Board notes that

> "there were opportunities for input from the public, other consultants, City and Regional staff, but the overall accountability, responsibility and 'guiding intelligence' for the total environmental assessment process was not obvious. From amongst the multitude of councillors, committees and consultants, none emerged with a firm hand on the helm, asking the difficult questions and demanding meaningful answers ... we conclude that in this case the evaluation was weak because, as it unfolded, the evaluators seemed to lose sight of the collective impact in the mass of minutia." (p.168)

There are other examples of this "project management" problem throughout the decision. For example, in the "social impact" section the Board notes that

> "the degree of interaction between these factors is obvious. Duplication of findings is also evident (e.g., 'emotional impact' with 'social equity' or, 'disruption of households nearby' with 'noise'). What was not clear in the course of the Hearing was who had the final say as to the importance of a given impact: the planning consultant under land use compatibility, the social impact assessor under land use planning in the context of community disruption, or the senior consultant when considering social impact versus Planning Act matters." (p.18)

• environmental assessment timeframe - the paradox is that despite the length of the overall site selection process, the study team (and the Ministry, for that matter) were constantly faced with what the Joint Board calls "short timeframe" problems. The Board finds that there is a need for "better long-range planning". As part of this scenario,

> "there needs to be time for the Ministry of the Environment to respond to environmental assessments. There also needs to be time for those preparing assessments to complete one stage before commencing the next." (p.168)

• timing and content of reports:

> "to be useful, a report should provide enough clear information on the assumptions, procedures used, and conclusions drawn, to allow comprehension of the report as it stands, and fair and reasonable cross-examination. Such reports should be provided in a timely fashion to all parties ... failure to deliver the document may be an example of 'games-playing' in an adversarial forum, but this approach is not helpful to the Board in the course of a hearing." (pp.164-165)

• relevance of evidence - the Joint Board found that arguments which were outside the purpose of the undertaking, in this case "establishment of a landfill as a way of dealing with waste" (e.g., "creating a park 20 or 30 years hence, or saving agricultural land from subsequent urban encroachment") as "time-consuming and off-track ... (and) not helpful to the Board in making a decision." (p.165)

• level of detail - the Joint Board noted that several witnesses "were called upon to review fundamental techniques in a painstaking step-by-step fashion. Sometimes they were asked to read correspondence or other reports line by line, paragraph by paragraph, page by page." The concern is that while "this took a great deal of time ... the questions that flowed from such readings did not appear to justify the expenditure of time." (p.166)

• advocacy "evidence" - the Joint Board is critical of the way experts took on the role of advocates for the particular party they represented. It concludes that this approach

> "may suit the adversarial nature of hearings and the obligation of counsel to 'protect clients' interests', but it is counterproductive and risky for a hearing Board to decide on environmental suitability in such a climate ... (and) this attitude handicapped the Board in its effort to select the most environmentally suitable location for a landfill in Halton." (p.168)

The Joint Board concludes that "at the application of standard siting criteria is critical to the perception of fairness in the site selection process" and that "in the Board's view the apparent predilection for one site (Site F) did not bolster public confidence in the process that was about to unfold." (p.159)

Implications

The Joint Board's comments on the hearing process provide the following insights:

- the Joint Board saw its primary role as being responsible for selecting the most environmentally suitable location for a landfill in Halton and expected that all interventions at the hearing should have been made with the purpose of assisting the Board in that task. While this may be somewhat naive in an adversarial setting, the Joint Board used its power to penalize those parties it deemed hindered this objective by awarding costs against them;

- procedural rules are required for sharing of information and conduct of intervenors at hearings. Steps along these lines are being taken in a number of other cases (Peel, Timber Management) based on the Halton experience;

- the Joint Board suggests that specific alternative(s) should be discarded at the point in the evaluation process when available information warrants it, without deferring the decision until a similar level of detail is available for the other alternatives being considered;

- the Halton case provides a good example of poor project management on behalf of the Region (in providing direction for its consultants) and the lead consultant (in providing direction to its subconsultants and synthesizing information received from them). One potential solution is for proponents to take the day-to-day project management function away from committees or consultants by hiring project managers solely dedicated to, and accountable for, EA approvals. Halton Region has already done this;

- "crisis management" situations are clearly a poor environment for doing long-range planning and conducting EAs. The Joint Board's call for "better long-range planning", longer timeframes for comment and stage-by-stage completion of study processes suggests the need for a change in planning approach. The challenge is to move from the current periodic, crisis-oriented approach used by municipalities (and the Ministry of the Environment) to a more ongoing, proactive approach in which continual monitoring and information feedback maintains control of the system by avoiding crisis situations. A thermostat's role in maintaining room temperature within a narrow range provides a simple example of such a monitoring and feedback system;

- the issue of "the appearance fairness " is highlighted by the Joint Board and should become a prominent aspect of future EA Branch advice to proponents, in conjunction with the related issues of consistency and social equity; and

- a final implication of the Halton hearing experience relates to the actual format of the hearing. Clearly, the adversarial, quasi-judicial approach has advantages: the right for intervenors to subpoena information, hear evidence under oath and extensively cross-examine witnesses. The Halton hearing and the Joint Board in its decision also highlighted its disadvantages: the extensive financial and time commitment, the adversarial "games-playing", advocacy evidence from expert witnesses and little tolerance for lay witnesses whose evidence strayed beyond the rather narrow boundaries of what the Joint Board considered "relevant".

  If one of the important goals of EA is to encourage fully informed, environmentally sound decision making EAPIP should be giving serious thought to whether this format is indeed the best way to achieve this goal or if there are more suitable approaches.

4.5 Municipal In-fighting

The Joint Board was very critical of two of Halton's area municipalities (Milton and Burlington) for the in-fighting and obstructionism they exhibited during the EA process.

In Milton's case:

> "the Town of Milton would not amend its Official Plan and the zoning of the Tremaine/ Britannia site (approved by the OMB in 1979). This action was not supportive of the Region's efforts to find the most environmentally suitable landfill site in the Region." (p.8)

In Burlington's case:

> "the night before (the Region) announced its intention to proceed with comparative studies that included the NSP lands (part of Site F) in Burlington, the City of Burlington Council resolved to expropriate part of the lands that would have been required. This action was not supportive of the Region's effort to find the most environmentally suitable landfill site in the Region." (p.8)

And Milton's response to Burlington's action:

> "meanwhile the Town of Milton Council decided that it would be a good idea to rezone the old Tremaine/Britannia site to agricultural uses so that landfill there would not be permitted. At the same time they would not approve the rezoning of the proposed Site D in Milton. In short, landfill would not be a permitted use anywhere in Milton." (p.9)

The Joint Board is particularly critical of the Town of Milton's decision to "remove any designation for a landfill site within the Town of Milton, somehow hoping that this would mean that any Halton landfill sites in the future would have to go to some other municipality." The Joint Board indicates that Milton's actions were clearly not within the general intent for regional government in the Province of Ontario ... (or) consistent with wise environmental management in this province."

It concludes that,

> "the Board cannot accept that the absence of specific zoning for landfill in municipalities comprising a given regional government is a reasonable basis for denial of the siting of a landfill. To accept this premise would be to offer faint hope to all municipalities of a false avenue to deny landfilling anywhere in the Province of Ontario." (p.129)

On a more positive note, the Region is complimented for permitting experts of other parties to the Hearing to observe the drilling operations at both Site F and Site D during the course of the Region's detailed comparative technical studies. The Joint Board indicates that it "appreciates the proponent's action in this regard, and recommends this practice be adopted for all landfill environmental assessments." (p.60)

Implications

Clearly, the Joint Board was not impressed with the degree of infighting that occurred among Halton's area municipalities over the landfill site selection process. Halton is not a unique case, however, as the current landfill site selection battle in Peel Region (Mississauga and Caledon v. Brampton) illustrates. York and Durham Regions' battles with Metropolitan Toronto provide a similar example within a larger multi-regional setting. What to do about this infighting is the difficult question. It may be an inherent characteristic of all locally undesirable facility siting processes. On the other hand, more collaborative approach on the part of the Region and other parties may have been more productive.

Regardless, it appears the Board takes a dim view of this behaviour and it may be one of the predisposing factors which lead to decisions on awarding costs against certain parties at the conclusion of the hearing process. Proponents and potential intervenors should be made aware of this situation.

4.6 Public Consultation and Social Impact Assessment

Although public consultation and social impact assessment (SIA) are included under the same section, here they are not identical but complementary activities. Essentially, public consultation programs ask for the input of interested or affected interests into the planning process in an organized effort to identify and incorporate the value preferences of the various publics. The SIA field (whose objective is to describe the social changes that are the direct or indirect effects of a proposed policy, program or project), seeks to evaluate the type of effects a project will have on those potentially affected.

4.6.1 Public Consultation

The Joint Board is clearly concerned about the level of apprehension and fear aroused in citizens living nearby to the two preferred landfill sites, D and F. The following passages indicate that the Joint Board sees a two-fold responsibility in the conduct of EA public consultation programs.

Firstly, a burden on the proponent to communicate clearly about the proposal with those who may be potentially affected by it as a way of reducing apprehension levels.

> "the Board found that a lack of understanding about the Region's proposal and its associated mitigating measures fueled unnecessary fears about possible impacts. Ways must be found to ensure that potentially affected citizens have a good understanding of the steps being taken to minimize environmental impacts of landfill operations." (p.27)

Secondly, a burden on those potentially affected by a proposal to educate themselves about it. The Joint Board evidently believes that, in the Halton case, residents' fears were fueled by a lack of information and/or understanding about what the Region was proposing. For example,

> "the Board is concerned about the extent to which several residents in the vicinity of Site D were apparently unaware of what was going on around them, although the Board heard no evidence to suggest that the proponent had not been thorough in providing appropriate notice." (p.23)

And again on the issue of self-education,

> "the Board finds that a number of expressed concerns did not correspond to the facts about the proposed undertaking, and that many nearby residents had not taken the opportunity to read the environmental assessment documents prepared for their use as well as for other official uses." (p.24)

The Joint Board also seems frustrated with those opponents who dwelled on individual "rights" not to be harmed by the Region's proposal without an equal acknowledgement of their social responsibility as part of the problem to find ways of dealing with it. For example, the Board found that

> "the frequent and valuable vocal opposition to landfill proposals was not matched by evidence of a willingness to reduce the problem at source, either individually or in concert with others." (p.27)

The Joint Board concludes that, partly as the result of the Region's weak public consultation efforts, "citizens in the vicinity of both sites have been led to believe that the consequences of the establishment of a landfill in their area would be far more serious than the facts support." (p.163) As one possible way to counteract this situation, the Joint Board suggests that,

> "there ought to be an obligation on someone (Environment Ministry Officials or legal counsel perhaps), to ensure that where local residents' fears do not relate to the fact situation they are properly informed at the earliest opportunity." (p.23)

However, assuming that "getting out the facts" and "educating" people will reduce the level of anxiety people feel about a landfilling proposal is unlikely to succeed since facts only serve to reinforce value positions, not create them. A better approach would be to design public consultation programs to solicit and then incorporate these values into the planning process up front before decisions on technology or sites are made.

4.6.2 Social Impact Assessment (SIA)

SIA and public consultation are linked because their treatment by the Region, in the eyes of some residents, was equally shoddy. For example,

> "(a number of Aldershot residents around Site F) believed that ... the public meetings did not accommodate public concerns ... (and that) the assumed area of social impact selected by the Region was too small to be meaningful. Many Aldershot residents felt that they were affected by present and proposed landfill sites and that their perception of distress was not taken into account as a social impact factor." (p.163)

The Joint Board agreed with this criticism and concluded that "the Region's original (SIA) study was flawed in a number of respects, leading to the dismissal of certain community effects that should have been included." (p.28) Other significant comments related to the Region's SIA and SIA in general, include:

- the Joint Board found "considerable merit in (the) criticism ... (that the) social impact assessment was based on (the assessor's) subjective perception of impact on individuals in the areas affected, rather than on actual expressions of concern by these individuals." (p.19)

- the Joint Board felt that for SIA studies to be effective assessors must interact directly with potentially affected populations to determine impacts rather than adopt the "scientific" or "technical" role of "quarantin(ing) the population being studied in order to avoid the risk of becoming infected with its bias." (p.19)

- SIA prediction methods need to be sensitive to both the quantitative and qualitative aspect of potential impacts. In the Halton case the Region's SIA consultant was criticized "with good reason in the Board's view ... for example, a low, medium or high rating in the 'population impact' factor was determined by the number of members in a household, regardless of whether the house in which they lived was right next door to the landfill site or as much as 2 kilometers away". (p.17)

- the Joint Board accepts that "the perception of risk is an important factor in environmental assessment" but that "it ought not to be as significant a social factor as dislocation and other quantifiable physical factors." (p.22) And in the relationship between risk perception and related stress, the Joint Board notes that "this is a difficult matter to deal with since the Board must deal with realities and facts, while recognizing that perception of stress itself causes stress, and thus can cross the boundary into reality. While the Board must decide on the weight to be given to this 'reality', the proponent must be sensitive to its existence." (p.163)

Social Equity

Some of the most important comments related to SIA are on the issue of social equity in the siting of a landfill. Firstly, the Joint Board downplays the concept of equity in facility siting based on origin of waste volumes,

> "it was suggested to the Board that the sources of wastes within the Region should affect our decision on social equity. In large measure, we disagree with this argument. Because 'environment' means 'the social, economic and cultural conditions that influence the life of man or a community,' (R.S.O. 1980. c.140, s.1) among other things, and because the continued location of a landfill in one community could affect such conditions, there will be some effect. But in this case there are so many other more important factors to consider that 'sources of waste' pales by comparison." (p.11)

However, the Joint Board does accept and promotes the need to incorporate equity considerations in facility siting by rejecting the conventional wisdom which assumes that the area surrounding an existing site will be less affected by the introduction of a new landfill site than an area which is not currently near a landfill. For example,

> "the Board got the impression ... that the philosophy 'once a landfill area always a landfill area' should prevail. Indeed, witnesses argued that because the Burlington landfill and Bayview Park sites already exist, local residents should not be offended by the introduction of a third site. This Board does not accept such reasoning as it finds no foundation for it in the legislation under consideration." (p.34)

And even more strongly in the following passage,

> "as part of the rationale for selecting Site F (in Burlington), it was suggested ... that putting the landfill in the vicinity of Milton (Site D) would be like introducing a 'skunk at a garden party'. The Board cannot accept this rationale as the determinant in landfill site selection, for to do so would be to pre-suppose that future landfills can only be established adjacent to existing landfills, since this is the only way in which they would not constitute a new and disruptive factor." (p.136)

Overall, the Joint Board seems to be sending a mixed message on the conduct and relevance of SIA and public consultation processes in the EA hearing and decision-making process. For example, the Joint Board downplays the need for SIA studies in the following passage,

> "Social impact assessment is unlike the physical sciences; for the physical sciences, the Board may need the assistance of an expert in order to understand the raw data and their meaning. Such intermediaries are not necessarily needed to understand people's feelings; <u>people can express these feelings directly, in the forum of the Hearing</u> ... this Board was not convinced that the services of an 'emotional translator for the community' was necessary". (p. 21) (underlining added)

However, when individual citizens did express their feelings "directly, in the forum of the Hearing" the Joint Board seemed to devalue its relevance as the following passage indicates,

> "the Board is concerned about the extent to which individual citizen witnesses digressed in providing their non-expert evidence. In many cases the digression was not helpful to the Board. It would be useful if counsel would instruct 'non-expert' witnesses on the nature of the decision and the kinds of evidence which could assist a Board in arriving at a correct decision. Allowing such witnesses to stray into extraneous material was not helpful." (p. 163)

Having said that, the Joint Board concedes that there may be a role for SIA practitioners,

> "(to) agglomerate, amplify or filter the feelings of a large number of people in an attempt to categorize them and thus make the more useful for the hearing process." (p. 22)

Clearly, the role of public input and SIA in the EA planning and decision-making process is not universally agreed upon although there is widespread acceptance of the need for it. This is an area of environmental assessment which requires further work.

Implications

There are several important implications for the EA program from the Joint Board's treatment of public consultation/SIA. They include:

- the Joint Board tentatively accepts the premises behind SIA as a new and relevant factor in EA processes province-wide. SIA is likely to become more prominent in the future. The Government Review process should have the capability to provide a competent critique of SIA study approaches, methods and results.

- the Joint Board appears to be calling for two complementary changes in public consultation/SIA processes. Firstly, more involvement and awareness among potentially affected parties. Secondly, more sensitivity on behalf of proponents in soliciting and incorporating public input into the EA process.

- despite recent improvements, public consultation and its role in environmental assessment processes still appears to be misunderstood. The Joint Board itself is sending a mixed message in the Halton decision. Needed is a clarification of the above and an outreaching program to educate the process stakeholders about their rights and responsibilities for public consultation.

- the Joint Board rejects, on the grounds of social equity, the conventional wisdom that it is better to site a new landfill adjacent to an existing one than to disrupt a new area. This could have significant implications for EA processes throughout the Province. Evidence at Halton indicates the "conventional" approach is overwhelmingly favoured (79%).

5.0 CONCLUSIONS

Based on the Halton experience, the Joint Board decision has important things to say about how future solid waste management EAs should be conducted. Highlights include comments related to:

- broadening the consideration of reasonable alternatives to landfilling
- strengthening the need for consistency, procedural fairness and social equity in facility siting processes
- defining a "single" undertaking
- providing a stronger and more critical evaluation during the Government Review
- ways to streamline the existing, virtually open-ended hearing process
- toning down or penalizing municipal infighting through cost awards
- the emerging role of SIA in the EA process

These points, and their implications have been outlined in the body of this report.

On the other hand, the Halton decision is disappointing on two key aspects of the EA process important to the EA Branch. Firstly, the Joint Board sends a mixed and confusing message on public consultation. It asks for direct contact with potentially affected citizens to hear their concerns first hand only to later question the relevance of some of their comments, labelling them "digressions" and "extraneous". The Joint Board also criticizes the EA Branch's handling of the Government Review and calls for "dedicated, intelligent and constructively critical" involvement in the future from the EA Branch. However, the Joint Board backs away from further elaboration on the meaning of this phrase by alluding to rules emerging through future experience.

Perhaps the most powerful and troubling lesson to be taken from the Halton Region landfill EA process is the tremendous expenditure of time, money and human resources that can be involved in gaining approvals for a landfill in Ontario today. The Region can be criticized for its approach and the Halton EA labelled a "worst case scenario". However, the fact remains that many other solid waste management proposals whose planning approach is clearly weaker than Halton Region's are slowly moving through the EA process. These proposals will soon require a Government Review and perhaps also a hearing before a decision is made on approval. If the extensive critique Halton Region received on its EA efforts is now the standard, some doubt must now exist about whether other weaker EA planning efforts are likely to be approved.

Another of the key questions that needs to be explored by the Province in the wake of the Halton experience is "whether the existing EA planning and regulatory approvals system can be sustained in the face of existing (and future) resource requirements?"

The existing system is sufficiently taxes that key stakeholders like the EA Branch are scrambling to react to existing demands. The additional double-barrelled demands of multiple solid waste management hearings and a call for more "hands on" involvement throughout the EA process suggest that a major overhaul is needed or the existing system will break down completely.

The challenge facing EAPIP, EA Branch staff and other interested parties is to find modifications that maintain the EA concept of promoting informed, environmentally sound decisions within a more workable framework. The Halton experience provides clear mandate to critically examine the advantages and disadvantages of maintaining quasi-judicial public hearings within such a framework.

6.0 RECOMMENDATIONS

6.1 That EA Branch staff advise public sector solid waste management proponents to:

(a) demonstrate an appreciation of both the projected volumes and predicted composition of the waste stream to be managed during the study period.

(b) go beyond a cursory canvassing of solid waste management alternatives to consider, at a minimum, the following alternative technologies/processes: composting; residential waste reduction programs; industrial and commercial reuse and recycling; and commercial and residential (including apartment buildings) source separation programs.

(c) establish an acceptable evaluation approach and to clearly and consistently follow it throughout the facility siting process without either manipulating the criteria or introducing unreasonable exceptions during that process.

(d) select and take forward, at the completion of the EA planning process, a single site undertaking rather than one consisting of two or more sites.

6.2 That the EA Branch including EAPIP and other interested parties, assign a top priority to discussing and reaching consensus on what is meant by more "dedicated, intelligent and critical involvement of members of the Environmental Assessment Branch (during the EA process) before the hearing process begins." This includes:

(a) the role of EA Branch staff in providing advice and the type of advice provided during PSC
(b) the role and format of the Government Review in the EA program
(c) the role of the EA Branch coordinator in the Government Review
(d) a series of "adequacy criteria" for EA processes and documents that go beyond a repetition of the legal wording found in s.1(c) and s.5(3) of the EA Act.

6.3 That the EA Branch, in conjunction with the EA Board and other interested parties, investigate ways to streamline the hearing process for solid waste management and other EA applications. In the short term this might include:

(a) developing and implementing procedural rules for the sharing of information, conduct of intervenors and scope of issues to be covered at particular hearings.

(b) the threat and award of costs against those parties which the Board deems contravened these procedural rules.

(c) commissioning a study into the advantages and disadvantages of the various approaches used to resolve, arbitrate or mediate contentious proposals in other jurisdictions.

In the medium to long term this might include:

(d) altering or, if necessary, dissolving the present quasi-judicial framework and implementing an alternative decision-making framework that better fulfills the goals of environmental assessment for informed, environmentally sound decision-making.

6.4 That the EA Branch advise solid waste management proponents to hire a dedicated environmental assessment project coordinator (not a member of the consulting team or the steering committee) who is responsible for the day-to-day project management function.

6.5 That the EA Branch and the Ministry of the Environment investigate, formulate and implement strategies to move from the current periodic, crisis-oriented approach that currently characterizes solid waste management in Ontario to a more ongoing, proactive approach in which continual monitoring and information feedback maintain control of the system.

6.6 That the EA Branch clarify the role of stakeholder consultation within the EA process, including:

(a) roles and responsibilities of each process stakeholder
(b) appropriate methods and techniques at different stages of the process
(c) how stakeholder input should be incorporated into the EA planning process.

6.7 That the EA Branch ensure the Government Review Team has the capability to review and comment on the quality of social impact assessment studies that are a component of solid waste management environmental assessments.